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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/843,471

04/26/2001

Loren Christensen

33556

8113

116

7590

08/13/2004

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EXAMINER

CHANKONG, DOHM

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,471

Applicant(s)

CHRISTENSEN, LOREN

Examiner

Dohm Chankong

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4,4/01,5,1/02,7,8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-12 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following claims lack proper antecedent basis:

- i. Claims 10-12: "the system".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly

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from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharon et al, U.S. Patent No. 6,205,122 ["Sharon"].

6. As to claim 1, Sharon discloses a network topology discovery system, leveraging the functionality of a high-speed communication network [abstract], comprising the steps of:

distributing records of discovered network devices using a plurality of discovery engine instances located on at least one data collection node computer whereby the resulting distributed record compilation comprises a distributed network topology database [column 4, lines 20-50 and claim 1 where: a received message is equivalent to a record of discovered network devices, plurality of agents are equivalent in functionality to the claimed discovery engine instances, the agent located on the network element which is equivalent to the claimed data collection node computer]; and

importing the distributed network topology database onto at least one performance monitor server computer so as to enable network management [claim 1-(a.iv) and (b) where: central management engine is equivalent in functionality to the claimed PM server computer].

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7. As to claim 2, Sharon teaches the system of claim 1, wherein at least one discovery engine instance is located on the data collection node computers on a ratio of one engine instance to one central processing unit whereby the total number of engine instances is at least two so as to enable the parallel processing of the distributed network topology database [column 4, lines 22-30, column 8, lines 38-39 and column 12, lines 31-34].

8. As to claim 5, Sharon discloses a network topology discovery system, leveraging the functionality of a high-speed communication network [abstract], comprising:

at least one data collection node computer connected to the network for discovering network devices using a plurality of discovery engine instances whereby a distributed network topology database is created [column 4, lines 20-50 and claim 1 where: a plurality of agents are equivalent in functionality to the claimed discovery engine instances, the agent located on the network element which is equivalent to the claimed data collection node computer]; and

at least one performance monitor server computer having imported the distributed network topology database whereby network management is enabled [claim 1-(a.iv) and (b) where: central management engine is equivalent in functionality to the claimed PM server computer].

9. As to claim 6, Sharon teaches the system of claim 5, wherein at least one discovery engine instance is located on the data collection node computers on a ratio of one engine instance to one central processing unit whereby the total number of engine instances is at

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least two so as to enable the parallel processing of the distributed network topology database [column 4, lines 22-30, column 8, lines 38-39 and column 12, lines 31-34].

10. As to claim 9, Sharon discloses a storage medium readable by an install server computer in a network topology distributed discovery system including the install server, leveraging the functionality of a high speed communications network [abstract and column 7, line 64 to column 8, line 6], the storage medium encoding a computer processing comprising:

a processing portion for distributing records of discovered network devices using a plurality of discovery engine instances located on at least one data collection node computer whereby the resulting distributed record compilation comprises a distributed network topology database [column 4, lines 20-50 and claim 1 where: a received message is equivalent to a record of discovered network devices, plurality of agents are equivalent in functionality to the claimed discovery engine instances, the agent located on the network element which is equivalent to the claimed data collection node computer]; and

a processing portion for importing the distributed network topology database onto at least one performance monitor server computer so as to enable network management [claim 1-(a.iv) and (b) where: central management engine is equivalent in functionality to the claimed PM server computer].

11. As to claim 10, Sharon teaches the system of claim 9, wherein at least one discovery engine instance is located on the data collection node computers on a ratio of one engine

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instance to one central processing unit whereby the total number of engine instances is at least two so as to enable the parallel processing of the distributed network topology database [column 4, lines 22-30, column 8, lines 38-39 and column 12, lines 31-34].

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon in view of Compliment et al, U.S Patent No. 5,706,440 ["Compliment"].

14. Compliment was cited by Applicant in IDS #5, dated 1.22.2002.

15. As to claim 3, Sharon does not teach the system of claim 1, wherein a vendor specific discovery subroutine is launched upon detection by the system of a non-MIB II standard device so as to query the vendor's private MIB using a vendor specific algorithm.

16. Compliment teaches a system wherein a vendor specific discovery subroutine is launched upon detection by the system of a non-MIB II standard device so as to query the vendor's private MIB using a vendor specific algorithm [column 2, lines 55-63 and column 3,

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lines 48-51 where: the vendor specific extensions (equivalent to claimed discovery subroutines) are used upon detection of connected nodes (equivalent to a standard device) and the code of the vendor specific extension is equivalent to an algorithm].

17. Claim 7 is similar in scope to claim 3 and therefore is rejected for the same reasons provided in above paragraphs 15 and 16 for claim 3.

18. Claim 11 is a storage medium that implements the same steps of the system of claim 3. Therefore claim 11 is rejected for the same reasons as set forth in above paragraphs 15 and 16 for claim 3.

19. Claims 4, 8 and 12 are rejected under 35 U.S.C 103(a) as being unpatentable over Sharon in view of Sharon et al, U.S Patent No. 6,137,782 ["Sharon-2"].

20. As to claim 4, Sharon does teach the system of claim 1 wherein at least one client computer is connected to the network so as to communicate remotely with the performance monitor server computers [claim 1 where: the agents are equivalent to client computers], but does not disclose that the client computer is a performance monitor client computer.

21. Sharon-2 discloses that distributed agents in a network can be used to monitor traffic [i.e. network performance] [abstract]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Sharon-2's performance monitor

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functionality into Sharon's client computers to allow for traffic analysis of a network topology [column 2, lines 50-55].

22. Claim 8 is similar in scope to claim 4 and therefore is rejected for the same reasons provided in above paragraphs 15 and 16 for claim 4.

23. Claim 12 is a storage medium that implements the same steps of the system of claim 4. Therefore claim 12 is rejected for the same reasons as set forth in above paragraphs 15 and 16 for claim 4.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to further show the state of the art in regards to distributed network topology discovery:

U.S Patent No. 6,549,932 to McNally et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864.


The examiner can normally be reached on 8:00AM - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC


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